

Development of telg mote for wireless biomedical sensor network (WBSN) application

\Abstract

Wireless Sensor Network (WSN) consists of sensor nodes that interact with each other to collectively monitor environmental or physical conditions at different location for the intended user. One of its potential deployments is in the form of Wireless Biomedical Sensor Network (WBSN) to measure physiological signals. The WBSN applications would allow the medical practitioners to continuously monitor and update the status of a patient remotely. This paper focuses on the development of a wireless sensor node platform for WBSN application which complies with IEEE 802.15.4 standard and operates in 2.4 GHz ISM (industrial, scientific and medical) band. The initial state of WBSN development is the design of the wireless sensor node called TelG. The main features of TelG include low power consumption, wearable, flexible and small size. It is then embedded with a self-built operating system called WiseOS to support customized operations.